## REMARKS

### The Amendments

The two independent claims, i.e., claims 1 and 9, are amended to clarify that the meaning of $R^{10}$ does not overlap with the meaning of $R^{11}$ in formula (2). Thus, the polymers of formula (2) must always have at least three types of repeating units, i.e., they are at least terpolymers, because the repeating units denoted by variables t and w are always required and at least one of the variables denoted by variables u and v is required. As is now clarified, the repeating units denoted by variables v and w cannot be identical. Claims 5 and 13 are amended to require that the $R^4$ group defined therein is present because variable "r" is not 0.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

### The Rejection under 35 U.S.C. §102

The rejection of claims 1, 2, 4, 5, 7 and 8 under 35 U.S.C. §102(e), as being anticipated by Choi (U.S. Patent No. 6,284,438) is respectfully traversed.

As indicated above, the current claims are directed to polymers and compositions

containing them wherein the polymer of formula (2) has at least three types of repeating units. Units denoted by variables t and w are distinct required units and at least one unit denoted by variables u and v is required; the units denoted by variables v and w are also distinct from each other and from those denoted by t and u.

Choi discloses photoresist compositions and polymers therefore. Choi's compositions contain either a polymer A of formula 1 and polymer B of formula 2 or a polymer B of formula 2 and polymer C of formula 3. Each of the polymers A, B and C of Choi are copolymers, i.e., contain two – and only two – differing unit types within the polymer.

Choi fails to disclose a polymer, or composition containing it, which has three distinct recurring units. In its broadest generic sense, Choi only discloses polymers having two distinct recurring units. The specific Example 9 referred to in the Office Action also discloses only polymers with two distinct recurring units. One polymer therein has hydroxystyrene units and t-butylmethacrylate units and a different polymer has hydroxystyrene units and t-butoxycarbonyloxystyrene units. Such polymers do not meet the recitations of the instant claims. Particularly, no polymer (either generically encompassed or specifically described) meets the elements of the polymer of applicants' formula (2), as currently recited.

Accordingly, Choi fails to anticipate the instant claims and the rejection under 35 U.S.C. §102 should be withdrawn.

**The Rejection under 35 U.S.C. §103**

The rejections of claims 3 and claims 9-13, 15 and 16 under 35 U.S.C. §103, as being obvious over Choi in view of Houlihan (U.S. Patent No. 5,843,624) are respectfully traversed.

The failure of Choi to disclose applicants' invention is discussed above and that discussion is incorporated herein by reference. Choi provides no suggestion to modify its polymers to provide a polymer meeting applicants' formula (2).

Houlihan discloses polymers having units of the formulae shown in Figures 1-4. These polymers are quite distinct from those of applicants' invention and those of Choi since none of the recurring units of the Houlihan polymers are hydroxystyrene based. Compare all the units of applicants' formula (1) and the first two units of applicants' formula (2). Thus, Houlihan provides no suggestion to modify the polymers of Choi in a manner which would suggest applicants' invention.

In the first 35 U.S.C. §103 rejection of claim 3, Houlihan was cited for its suggestion to use a dissolution inhibitor in a photoresist composition. Even if it is assumed that Houlihan would suggest using such in the compositions of Choi, such would not result in or suggest applicants' invention. As discussed above, the polymers in such combined composition would still be distinct from those of applicants' invention.

In the second 35 U.S.C. §103 rejection, Houlihan was cited for the dissolution inhibitor teaching, as above, and also for alleged equivalence of t-butyl and 1-methylcyclohexyl as acid labile groups. Again, even if it is assumed that Houlihan would suggest modifying the Choi polymer to replace t-butyl with 1-methylcyclohexyl as the acid labile group, such would not result in or suggest applicants' invention. The resulting polymer from such modification would still be a copolymer having only two distinct recurring units and would not meet or suggest the recitation of formula (2) of the claimed invention.

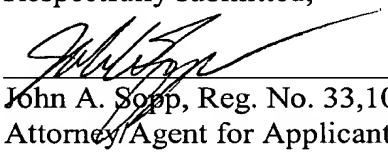
For the above reasons, it is urged that Choi alone or in view of Houlihan fails to render

the claimed invention obvious to one of ordinary skill in the art. Thus, the rejections under 35 U.S.C. §103 should be withdrawn.

It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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